Extron® Electronics

INTERFACING, SWITCHING AND DISTRIBUTION

User's Manual

P/2 DA2 WM/EC and AAP models

Distribution Amplifier

Precautions

Safety Instructions • English

This symbol is intended to alert the user of important operating and maintenance (servicing) instructions in the literature provided with the equipment.

This symbol is intended to alert the user of the presence of uninsulated dangerous voltage within the product's enclosure that may present a risk of electric shock.

Caution

Read Instructions • Read and understand all safety and operating instructions before using the equipment.

Retain Instructions • The safety instructions should be kept for future reference.

Follow Warnings • Follow all warnings and instructions marked on the equipment or in the user information.

Avoid Attachments • Do not use tools or attachments that are not recommended by the equipment manufacturer because they may be hazardous.

Consignes de Sécurité • Français

Ce symbole sert à avertir l'utilisateur que la documentation fournie avec le matériel contient des instructions importantes concernant l'exploitation et la maintenance (réparation).

Ce symbole sert à avertir l'utilisateur de la présence dans le boîtier de l'appareil de tensions dangereuses non isolées posant des risques d'électrocution.

Attention

Lire les instructions• Prendre connaissance de toutes les consignes de sécurité et d'exploitation avant d'utiliser le matériel.

Conserver les instructions • Ranger les consignes de sécurité afin de pouvoir les consulter à l'avenir.

Respecter les avertissements • Observer tous les avertissements et consignes marqués sur le matériel ou présentés dans la documentation utilisateur.

Eviter les pièces de fixation • Ne pas utiliser de pièces de fixation ni d'outils non recommandés par le fabricant du matériel car cela risquerait de poser certains dangers.

Sicherheitsanleitungen • Deutsch

Dieses Symbol soll den Benutzer auf wichtige Anleitungen zur Bedienung und Wartung (Instandhaltung) in der Dokumentation hinweisen, die im Lieferumfang dieses Gerätes enthalten ist.

Dieses Symbol soll den Benutzer darauf aufmerksam machen, daß im Inneren des Gehäuses dieses Produktes gefährliche Spannungen, die nicht isoliert sind und die einen elektrischen Schock verursachen können, herrschen.

Achtung

Lesen der Anleitungen • Bevor Sie das Gerät zum ersten Mal verwenden, sollten Sie alle Sicherheits-und Bedienungsanleitungen genau durchlesen und verstehen.

Aufbewahren der Anleitungen • Die Sicherheitsanleitungen sollten aufbewahrt werden, damit Sie später darauf zurückgreifen können.

Befolgen der Warnhinweise • Befolgen Sie alle Warnhinweise und Anleitungen auf dem Gerät oder in der Benutzerdokumentation.

Keine Zusatzgeräte • Verwenden Sie keine Werkzeuge oder Zusatzgeräte, die nicht ausdrücklich vom Hersteller empfohlen wurden, da diese eine Gefahrenquelle darstellen können.

Instrucciones de seguridad • Español

Este símbolo se utiliza para advertir al usuario sobre instrucciones importantes de operación y mantenimiento (o cambio de partes) que se desean destacar en el contenido de la documentación suministrada con los equipos.

Este símbolo se utiliza para advertir al usuario sobre la presencia de elementos con voltaje peligroso sin protección aislante, que puedan encontrarse dentro de la caja o alojamiento del producto, y que puedan representar riesgo de electrocución.

Precaucion

Leer las instrucciones • Leer y analizar todas las instrucciones de operación y seguridad, antes de usar el equipo.

Conservar las instrucciones • Conservar las instrucciones de seguridad para futura consulta.

Obedecer las advertencias • Todas las advertencias e instrucciones marcadas en el equipo o en la documentación del usuario, deben ser obedecidas.

Evitar el uso de accesorios • No usar herramientas o accesorios que no sean específicamente recomendados por el fabricante, ya que podrian implicar riesgos.

Warning

Power sources • This equipment should be operated only from the power source indicated on the product. This equipment is intended to be used with a main power system with a grounded (neutral) conductor. The third (grounding) pin is a safety feature, do not attempt to bypass or disable it.

Power disconnection • To remove power from the equipment safely, remove all power cords from the rear of the equipment, or the desktop power module (if detachable), or from the power source receptacle (wall plug).

Power cord protection • Power cords should be routed so that they are not likely to be stepped on or pinched by items placed upon or against them.

Servicing • Refer all servicing to qualified service personnel. There are no user-serviceable parts inside. To prevent the risk of shock, do not attempt to service this equipment yourself because opening or removing covers may expose you to dangerous voltage or other hazards.

Slots and openings • If the equipment has slots or holes in the enclosure, these are provided to prevent overheating of sensitive components inside. These openings must never be blocked by other objects.

Lithium battery • There is a danger of explosion if battery is incorrectly replaced. Replace it only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Avertissement

Alimentations• Ne faire fonctionner ce matériel qu'avec la source d'alimentation indiquée sur l'appareil. Ce matériel doit être utilisé avec une alimentation principale comportant un fil de terre (neutre). Le troisième contact (de mise à la terre) constitue un dispositif de sécurité : n'essayez pas de le contourner ni de le désactiver.

Déconnexion de l'alimentation• Pour mettre le matériel hors tension sans danger, déconnectez tous les cordons d'alimentation de l'arrière de l'appareil ou du module d'alimentation de bureau (s'il est amovible) ou encore de la prise secteur.

Protection du cordon d'alimentation • Acheminer les cordons d'alimentation de manière à ce que personne ne risque de marcher dessus et à ce qu'ils ne soient pas écrasés ou pincés par des objets.

Réparation-maintenance • Faire exécuter toutes les interventions de réparation-maintenance par un technicien qualifié. Aucun des éléments internes ne peut être réparé par l'utilisateur. Afin d'éviter tout danger d'électrocution, l'utilisateur ne doit pas essayer de procéder lui-même à ces opérations car l'ouverture ou le retrait des couvercles risquent de l'exposer à de hautes tensions et autres dangers.

Fentes et orifices • Si le boîtier de l'appareil comporte des fentes ou des orifices, ceux-ci servent à empêcher les composants internes sensibles de surchauffer. Ces ouvertures ne doivent jamais être bloquées par des objets.

Lithium Batterie • Il a danger d'explosion s'll y a remplacment incorrect de la batterie. Remplacer uniquement avec une batterie du meme type ou d'un ype equivalent recommande par le constructeur. Mettre au reut les batteries usagees conformement aux instructions du fabricant.

Vorsicht

Stromquellen • Dieses Gerät sollte nur über die auf dem Produkt angegebene Stromquelle betrieben werden. Dieses Gerät wurde für eine Verwendung mit einer Hauptstromleitung mit einem geerdeten (neutralen) Leiter konzipiert. Der dritte Stift oder Kontakt ist für einen Erdschluß, und stellt eine Sicherheitsfunktion dar und sollte nicht umgangen oder außer Betrieb gesetzt werden.

Stromunterbrechung • Um das Gerät auf sichere Weise vom Netz zu trennen, sollten Sie alle Netzkabeln aus der Rückseite des Gerätes oder aus dem Desktop-Strommodul (falls dies möglich ist) oder aus der Wandsteckdose ziehen.

Schutz des Netzkabels • Netzkabel sollten stets so verlegt werden, daß sie nicht im Weg liegen und niemand darauf treten kann oder Objekte darauf- oder unmittelbar dagegengestellt werden können.

Wartung • Alle Wartungsmaßnahmen sollten nur von qualifiziertem Servicepersonal durchgeführt werden. Im Inneren des Gerätes sind keine Teile enthalten, die vom Benutzer gewartet werden können. Zur Vermeidung eines elektrischen Schocks versuchen Sie in keinem Fall, dieses Gerät selbst zu warten, da beim Öffnen oder Entfernen der Abdeckungen die Gefahr eines elektrischen Schlags oder andere Gefahren bestehen.

Schlitze und Öffnungen • Wenn das Gerät Schlitze oder Löcher im Gehäuse aufweist, dienen diese zur Vermeidung einer Überhitzung der empfindlichen Teile im Inneren. Diese Öffnungen dürfen niemals von anderen Objekten blockiert werden.

Lithium-Batterie • Explosionsgefahr, falls die Batterie nicht richtig ersetzt wird. Ersetzen Sie nur durch diegleiche oder einen vergleichbaren Batterietyp, der auch vom Hersteller empfohlen wird. Entsorgung der verbrauchten Batterien bitte gemäß den Herstelleranweisungen.

Advertencia

Alimentación eléctrica • Este equipo debe conectarse únicamente a la fuente/tipo de alimentación eléctrica indicada en el mismo. La alimentación eléctrica de este equipo debe provenir de un sistema de distribución general con conductor neutro a tierra. La tercera pata (puesta a tierra) es una medida de seguridad, no puentearia ni eliminaria.

Desconexión de alimentación eléctrica • Para desconectar con seguridad la acometida de alimentación eléctrica al equipo, desenchufar todos los cables de alimentación en el panel trasero del equipo, o desenchufar el módulo de alimentación (si fuera independiente), o desenchufar el cable del receptáculo de la pared.

Protección del cables de alimentación • Los cables de alimentación eléctrica se deben instalar en lugares donde no sean pisados ni apretados por objetos que se puedan apoyar sobre ellos.

Reparaciones/mantenimiento • Solicitar siempre los servicios técnicos de personal calificado. En el interior no hay partes a las que el usuario deba acceder. Para evitar riesgo de electrocución, no intentar personalmente la reparación/mantenimiento de este equipo, ya que al abrir o extraer las tapas puede quedar expuesto a voltajes peligrosos u otros riesgos.

Ranuras y aberturas • Si el equipo posee ranuras o orificios en su caja/alojamiento, es para evitar el sobrecalentamiento de componentes internos sensibles. Estas aberturas nunca se deben obstruir con otros objetos.

Batería de litio • Existe riesgo de explosión si esta batería se coloca en la posición incorrecta. Cambiar esta batería únicamente con el mismo tipo (o su equivalente) recomendado por el fabricante. Desachar las baterías usadas siguiendo las instrucciones del fabricante.

FCC Class A Notice

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Note: This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to ensure compliance.

Extron's Warranty

Extron Electronics warrants this product against defects in materials and workmanship for a period of two years from the date of purchase. In the event of malfunction during the warranty period attributable directly to faulty workmanship and/or materials, Extron Electronics will, at its option, repair or replace said products or components, to whatever extent it shall deem necessary to restore said product to proper operating condition, provided that it is returned within the warranty period, with proof of purchase and description of malfunction to:

USA, Canada, South America, and Central America:	Europe, Africa, and the Middle East:	Asia:
Extron Electronics 1230 South Lewis Street Anaheim, CA 92805, USA	Extron Electronics, Europe Beeldschermweg 6C 3821 AH Amersfoort The Netherlands	Extron Electronics, Asia 135 Joon Seng Road, #04-01 PM Industrial Bldg. Singapore 368363

This Limited Warranty does not apply if the fault has been caused by misuse, improper handling care, electrical or mechanical abuse, abnormal operating conditions or non-Extron authorized modification to the product.

If it has been determined that the product is defective, please call Extron and ask for an Applications Engineer at (714) 491-1500 (USA), 31.33.453.4040 (Europe), or 65.383.4400 (Asia) to receive an RA# (Return Authorization number). This will begin the repair process as quickly as possible.

Units must be returned insured, with shipping charges prepaid. If not insured, you assume the risk of loss or damage during shipment. Returned units must include the serial number and a description of the problem, as well as the name of the person to contact in case there are any questions.

Extron Electronics makes no further warranties either expressed or implied with respect to the product and its quality, performance, merchantability, or fitness for any particular use. In no event will Extron Electronics be liable for direct, indirect, or consequential damages resulting from any defect in this product even if Extron Electronics has been advised of such damage.

Please note that laws vary from state to state and country to country, and that some provisions of this warranty may not apply to you.

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Chapter One

Introduction

About the P/2 DA2 WM/EC and P/2 DA2 WM/EC AAP

Features

Introduction

About the P/2 DA2 WM/EC and P/2 DA2 WM/EC AAP

The P/2 DA2 WM/EC and P/2 DA2 WM/EC AAP are a one input, two output, high resolution VGA/XGA distribution amplifier with audio. With a video bandwidth of 300 MHz, this distribution amplifier is compatible with VGA, SVGA, VESA, XGA, and SXGA graphics cards, monitors, projectors, and LCD panels.

For audio, the P/2 DA2 WM/EC features a 3.5 mm female jack for input and a 3.5 mm captive screw connector for balanced or unbalanced output.

The P/2 DA2 WM is the wallmount version and the P/2 DA2 EC is the Euro Channel version. The P/2 DA2 WM AAP and the P/2 DA2 EC AAP are the same base products, but with AAP faceplates added. These plates are a convenient method of providing various connectors for most audio and video applications.

Features

2-color power/signal LED — When the interface is On, the power/signal LED will light amber. When the interface is On and a signal is present, the LED will light green.

Gain/peak control— Compensates for signal degradation caused by long cable lengths.

Stereo audio — Front panel audio input jack and a 3.5 mm captive screw output connector on the rear panel.

Buffered local monitor output — 15-pin HD female connector

Computer video input — 15-pin HD female connector

Wall mountable (WM model) — Self-contained enclosure provides for convenient wall mounting.

Euro Channel mountable (EC model) — This model mounts easily in the Euro Channel raceway

Optional Architectural Adapter Plates — The P/2 DA2 WM may be user-configured with up to 4 Architectural Adapter Plates (3 for the EC version). These adapter plates provide a selection of pass-through signal connectors for various audio and video requirements.

P/2 DA2 WM/EC

2

Chapter Two

Controls and Installation

Front and Rear Panels

Installing the P/2 DA2 WM/EC

Controls and Installation

Front and Rear Panels
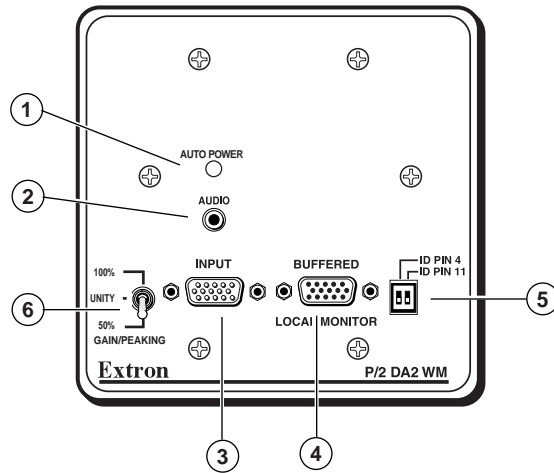
Front faceplate

Figure 2-1 — P/2 DA2 WM faceplate features

NOTE *Both WM and EC models have the same front and rear panel connectors and features. See figure 2-2.*

① **2-color power/signal LED** — lights amber to indicate power On only; lights green to indicate power On with video signal present.

② **Audio input jack** — 3.5 mm stereo input

③ **VGA input connector** — HD 15-pin male analog video input connector

④ **Buffered local monitor output** — HD 15-pin female for output to a local monitor

⑤ **ID bit termination DIP switches** — provides proper ID bit termination for a laptop computer that is not attached to a local monitor.

⑥ **3-position gain/peaking switch** — compensates for cable capacitance and resistance due to long cable runs; position switch for best image on the output display device.

   100% – increases the output signal level and adds 100% of the maximum peaking to the signal

Unity – output signal level is same as that of input with no added peaking

50% – increases the output signal level and adds 50% of the maximum peaking to the signal

NOTE *If the edges of the image seem to exceed their boundaries, or if thin lines and sharp edges look thick and fuzzy, try changing the level/peak setting.*
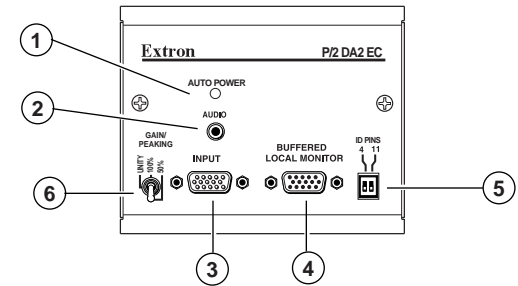

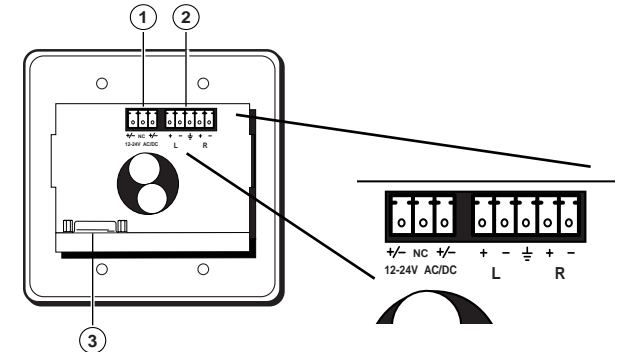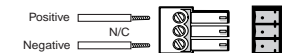*Figure 2-2 — P/2 DA2 EC faceplate features*

Rear connectors

Figure 2-3 — P/2 DA2 WM rear connectors

① **Power input** — 12 - 24 VAC or DC (captive screw connector). The center pole contains no conductor. Connect the conductors to the outer two poles only.

② **Audio output** — 3.5 mm captive screw stereo output

③ **VGA output** — HD 15-pin female analog video output connector

Installing the P/2 DA2 WM/EC

Easy setup procedure

The wall-mounted P/2 DA2 WM kit consists of the faceplate/distribution amplifier assembly and a mounting bracket which mounts in a wall opening and to which the faceplate assembly is attached. The P/2 DA2 EC kit consists of the faceplate/distribution amplifier assembly which mounts in the Euro Channel raceway.

1. For wall mounting only: Using the mounting template provided in the *"Appendix"* as a guide, carefully cut a mounting hole through the wall where the mounting bracket is to be installed.

2. For wall mounting only: Install the mounting bracket using the supplied screws and mounting clips. Refer to the section *"Installing the mounting bracket"* for further details.

3. Before connecting any cables, power off all equipment. If the optional Architectural Adapter Plate (AAP) is being installed, please refer to *"Installing Architectural Adapter Plates"* in this chapter.

4. The rear connectors are the same for both WM and EC models. Please refer to figure 2-3. Connect the VGA output cable to the 15-pin HD female output connector. To prevent installation debris or objects from entering the opening in the sheet metal just above this VGA connector, it is suggested that some masking tape be used to temporarily cover this opening. Remove this tape after installation is completed. Next, if there is audio output, connect the audio output cable to the 3.5 mm captive screw connector. Finally, connect the power cable to the power input connector. Refer to the *"Cabling"* and *"Connecting audio"* sections of this chapter.

5. Before attaching the faceplate assembly to the wall mounting bracket/Euro Channel, attach the computer video cable to the 15-pin HD female input connector on the faceplate. Next, a local monitor may be connected to the 15-pin HD female buffered local monitor output connector on the faceplate. Finally, for audio input, connect the audio cable to the faceplate's 3.5 mm audio input jack. Refer to the *"Cabling"* and *"Connecting audio"* sections of this chapter. For Euro Channel applications, refer to the *"Euro Channel installation"* section.

6. Power up all of the input and output devices.

7. The image should now display on screen. If it does not, double check steps 3 through 6 and make adjustments as needed. Refer to the section *"Setting the DIP switches"* in this chapter.

8. For the P/2 DA2 WM, attach the P/2 DA2 WM to the wall mounting bracket (see "*P/2 DA2 WM wall installation*").

   For the P/2 DA2 EC, attach the P/2 DA2 EC to the Euro Channel (see "*P/2 DA2 EC Euro Channel installation*").

Installing the mounting bracket

The wall-mounted P/2 DA2 WM kit includes a mounting bracket which is installed in a wall opening. The AAP version of the P/2 DA2 WM uses a wider mounting bracket, as shown below.

1. Once the proper wall location for mounting the distribution amplifier has been selected, cut an opening in the wall using the proper mounting template found in the *"Appendix"* section.

2. Using two supplied screws and mounting clips, attach the mounting bracket to the hole opening, as shown below.
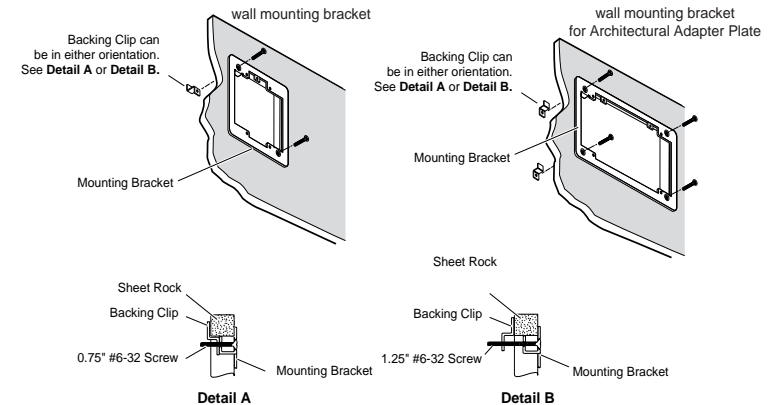

Figure 2-4 — Installing the mounting bracket

Controls and Installation, cont'd

Cabling

The P/2 DA2 WM cabling diagram below shows how to connect input and output devices to the distribution amplifier's front panel. The P/2 DA2 EC model has identical connectors.
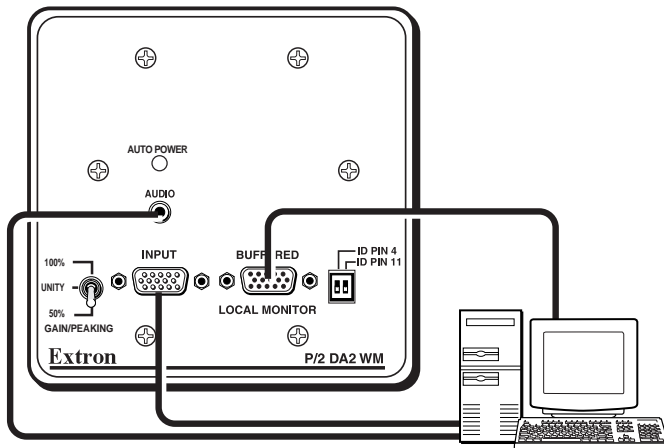

Figure 2-5 — P/2 DA2 WM cabling

1. Connect your display device to the 15-pin HD female video output VGA connector on the rear of the P/2 DA2 WM/EC. See figure 2-3.

2. For audio output, refer to the section *"Connecting audio output"* and connect the audio output cable to the 3.5 mm captive screw connector on the rear of the P/2 DA2 WM/EC.

3. Connect the power input cable to the rear power input connector of the P/2 DA2 WM/EC.

4. Connect the computer's video cable to the 15-pin HD female Input cable on the distribution amplifier's faceplate.

5. If a local monitor is being used, connect the monitor to the 15-pin HD female buffered local monitor output on the faceplate.

6. For audio input, connect the input device into the front faceplate's 3.5 mm female audio jack.

Connecting audio output

Before connecting audio output, determine whether your audio system is unbalanced or balanced. Then, follow the instructions below to connect unbalanced audio, or the instructions for "Balanced audio" to connect balanced audio.

WARNING *Wiring the audio incorrectly may damage the audio output circuits.*

Unbalanced audio

To attach the P/2 DA2 WM/EC to an unbalanced audio system, do the following:

1. Attach the audio cable to an unbalanced speaker input connector (tip and sleeve).
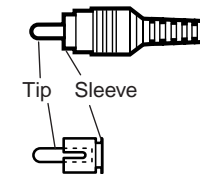
Tip   Sleeve

2. Attach the audio cable to the audio cable connector (Extron part number 10-319-10). Fasten the captive screws inside the audio cable connector as shown in figure 2-6.

Unbalanced Output

WARNING *Connect the sleeve(s) to ground (GND). Connecting the sleeve(s) to a negative (-) terminal will damage audio output circuits.*

Figure 2-6 — Fastening captive screws

3. Slide the audio cable connector into the audio output connector on the interface.

Balanced audio

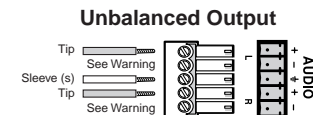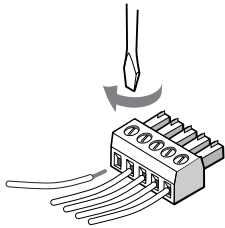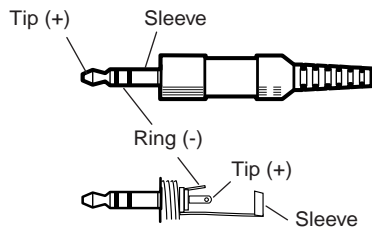To attach the interface to a balanced audio system, do the following:

1. Attach the audio cable to a balanced speaker input connector (tip, ring, and sleeve).

2. Attach the audio cable to the audio cable connector (Extron part number 10-319-10). Fasten the captive screws inside the audio cable connector as shown in figure 2-6.

Balanced Output
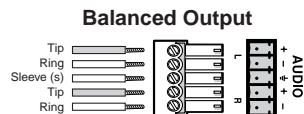
WARNING *Connect the sleeve(s) to ground (GND). Connecting the sleeve(s) to a negative (-) terminal will damage audio output circuits.*

3. Slide the audio cable connector into the audio output connector on the interface.

Installing Architectural Adapter Plates

The P/2 DA2 WM AAP may have up to 4 optional adapter plates and the P/2 DA2 EC AAP can have up to 3 adapter plates. The adapter plates provide a convenient method of adding various connectors for specific audio and video requirements. The adapter plates must be ordered separately and must be attached to the faceplate and cabled before attaching the WM AAP model to the wallmount bracket or the EC AAP model to the Euro Channel. See figure 2-7.

1. Insert the adapter plate captive screws through the front faceplate holes. Secure the adapter plate using the supplied washers and nuts.
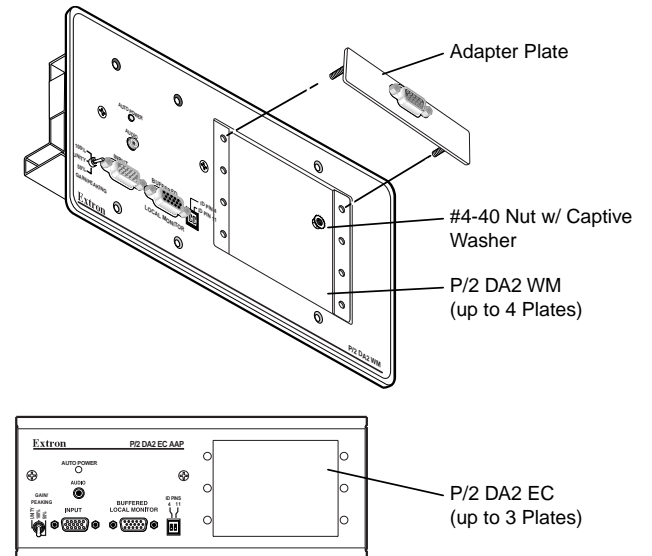
Figure 2-7 — Installing adapter plates

2. Attach the output cables to the back side of the adapter plate. Some adapter plates may require that conductors be soldered to the connectors. Attach foil and braided shields to ground connections.

P/2 DA2 WM wallmount installation

Once the input and output cables have been connected and the P/2 DA2 WM has been successfully tested, the faceplate may be attached to the mounting bracket using the 4 supplied screws. See figure 2-8.

NOTE *The center pole of the power input connector contains no conductor. Connect the conductors to the two outer poles only, exactly as shown here.*

Positive
N/C
Negative
+

Audio (3.5mm Captive Screw Connector)

Power (3.5mm Captive Screw Connector)

VGA Connector
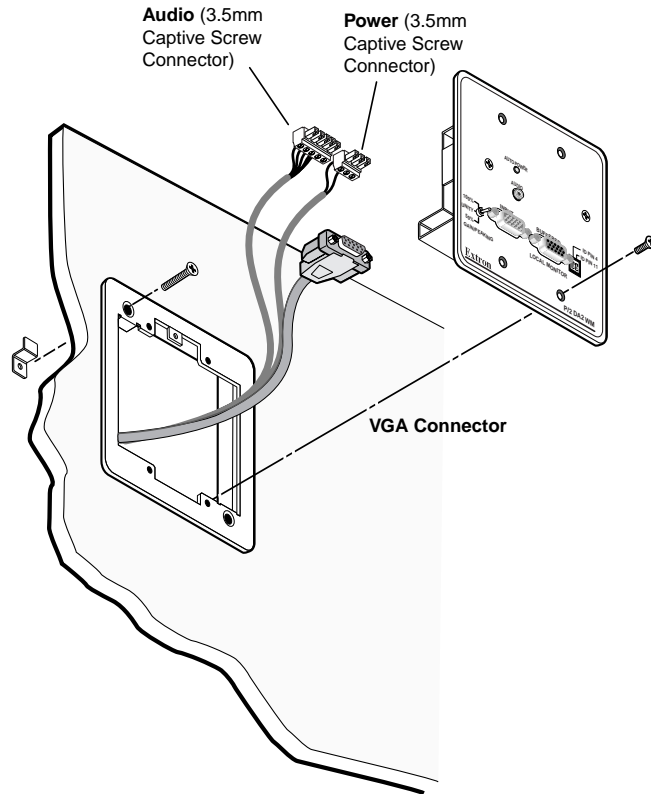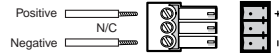
Figure 2-8 — Wall mounting the P/2 DA2 WM

P/2 DA2 EC Euro Channel installation

Once the input and output cables have been connected and tested on the P/2 DA2 EC, the distribution amplifier can be easily installed in the Euro Channel.   See figure 2-9.
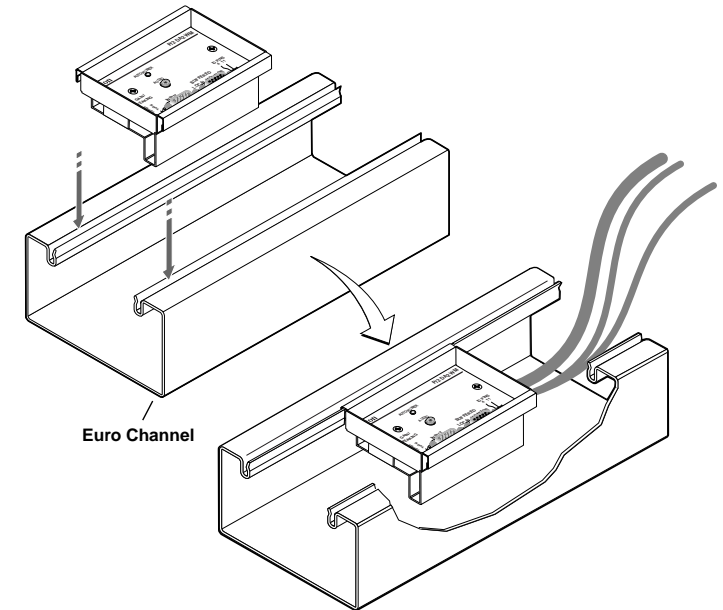
Euro Channel

Figure 2-9 — Euro Channel installation

Setting the DIP switches

Two sliding-type DIP switches can be found on the faceplate of the P/2 DA2 WM/EC.

To set the sliding-type DIP switches, slide the switch to the on/closed or off/open position.

The two DIP switches provide proper ID bit termination for a laptop computer that is not attached to a local monitor.

ID PIN 4 & ID PIN 11

ID PIN 4
ID PIN 11

ON — Set both pins to On if you are using the P/2 DA2 WM/EC with a laptop computer that *is not* attached to a local monitor.

OFF — Set both pins to Off if you are attaching a
local monitor to the P/2 DA2 WM/EC.

P/2 DA2 WM/EC

Appendix

Specifications

Faceplate Dimensions

Cables

Architectural Adapter Plates

Mounting Templates

Appendix

P/2 DA2 WM/EC Specifications

Video input

Number/signal type .... 1 VGA/SVGA/XGA/SXGA RGBHV, RGBS, RGsB, RsGsBs

Connectors .... 1 15-pin HD male

Nominal level(s) .... Analog .... 0.7V p-p

Minimum/maximum level(s) .... Analog .... 0.4V to 2.0V p-p with no offset

Impedance .... 75 ohms

Horizontal frequency .... Autoscan 15 kHz to 135 kHz

Vertical frequency .... Autoscan 30 Hz to 170 Hz

Return loss .... -38.3dB @ 5 MHz

Maximum DC offset 200mV

Video throughput

Gain .... Unity, (0.1V) 15% peaking, (0.2V) 30% peaking

Bandwidth .... 300 MHz (-3dB), fully loaded

Video output

Number/signal type .... 2 VGA/SVGA/XGA/SXGA RGBHV, RGBS, RGsB, RsGsBs

Connectors .... 2 15-pin HD female (1 display, 1 local monitor)

Nominal level .... Unity (1x input level)

Impedance .... 75 ohms

Return loss .... -41dB @ 5 MHz

DC offset .... ±5mV maximum

Sync

Input type .... Autodetect RGBHV, RGBS, RGsB, RsGsBs

Output type .... Autodetect RGBHV, RGBS, RGsB, RsGsBs

Input level .... 3.0V to 5.0V p-p

Output level .... TTL .... 5.0V p-p

Input impedance .... 510 ohms

Output impedance .... 75 ohms

Max. propagation delay .... 18.8 nS

Max. rise/fall time .... 4 nS

Polarity .... Positive or negative (follows input)

Audio input

Number/signal type .... 1 stereo, unbalanced

Connectors .... 1 3.5 mm female stereo jack, 2 channel; tip (L), ring (R), sleeve (GND)

Impedance .... 50 ohms, unbalanced

Audio throughput

Gain .... Unbalanced 0dB, balanced +6dB

Frequency response .... ±0.05dB @ 20 Hz to 20 kHz

S/N .... >90 kHz, output 21dB, balanced

Audio output

Number/signal type .... 1 stereo, balanced/unbalanced

Connectors .... 1 3.5 mm captive screw terminal, 5 pole

Impedance .... 50 ohms unbalanced; 100 ohms balanced

General

Power.. 12 to 24VAC or VDC, 0.5A, 5 watts, external

Temperature/humidity .... Storage -40° to +158°F (-40° to +70°C) / 10% to 90%, non-condensing

.... Operating +32° to +122°F (0° to +50°C) / 10% to 90%, non-condensing

Rack mount.................................. No, but wall- or furniture-mountable

Enclosure type ....Metal

Enclosure dimensions

P/2 DA2 WM .... Plate.. 4.50" H x 4.60" W (11.43 cm H x 11.68 cm W)

P/2 DA2 WM AAP .... Plate.. 4.50" H x 8.20" W (11.43 cm H x 20.83 cm W)

P/2 DA2 WM EC............. Plate.. 3.12" H x 3.94" W (7.92 cm H x 10.01 cm W)

P/2 DA2 WM EC AAP .... Plate.. 3.15" H x 7.69" W (8.00 cm H x 19.53 cm W)

All models........................ Box ... 3.00" H x 3.50" W x 1.60" D (7.62 cm H x 8.89 cm W x 4.06 cm D)

Shipping weight .... 2 lbs (0.9 kg)

Vibration .... NSTA 1A in carton (National Safe Transit Association)

Approvals .... UL, CE

MTBF .... 30,000 hours

Warranty .... 2 years parts and labor

NOTE   *Specifications are subject to change without notice.*

P/2 DA2 WM Faceplate Dimensions

Dimensions of the P/2 DA2 WM and its AAP version are provided here for those who wish to make their own customized faceplate. The following diagrams are not drawn to scale.
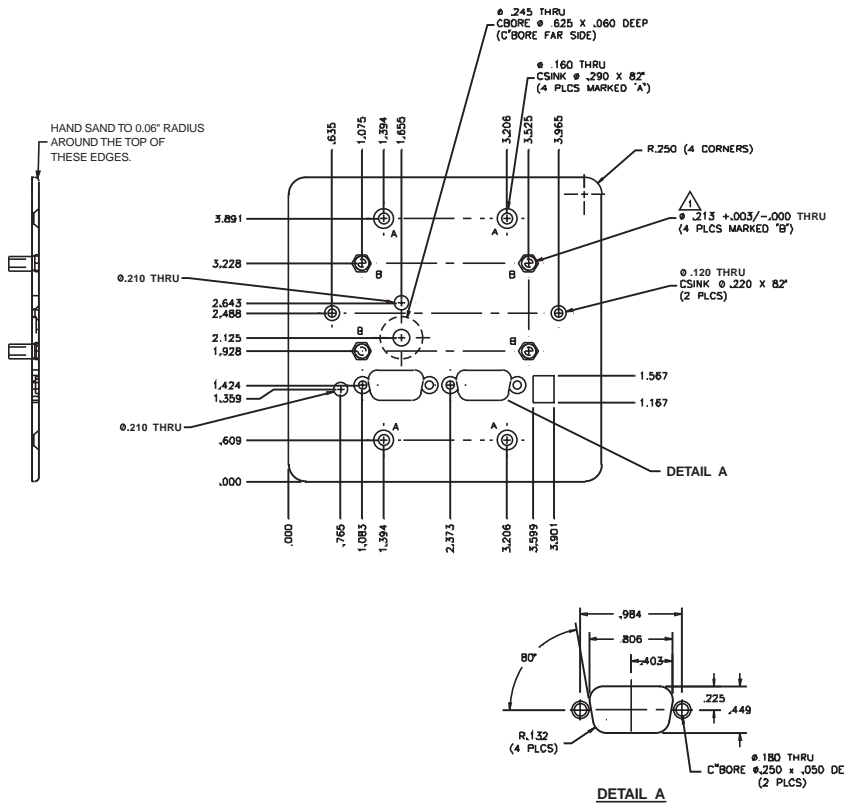

Figure A-1 — WM model faceplate dimensions
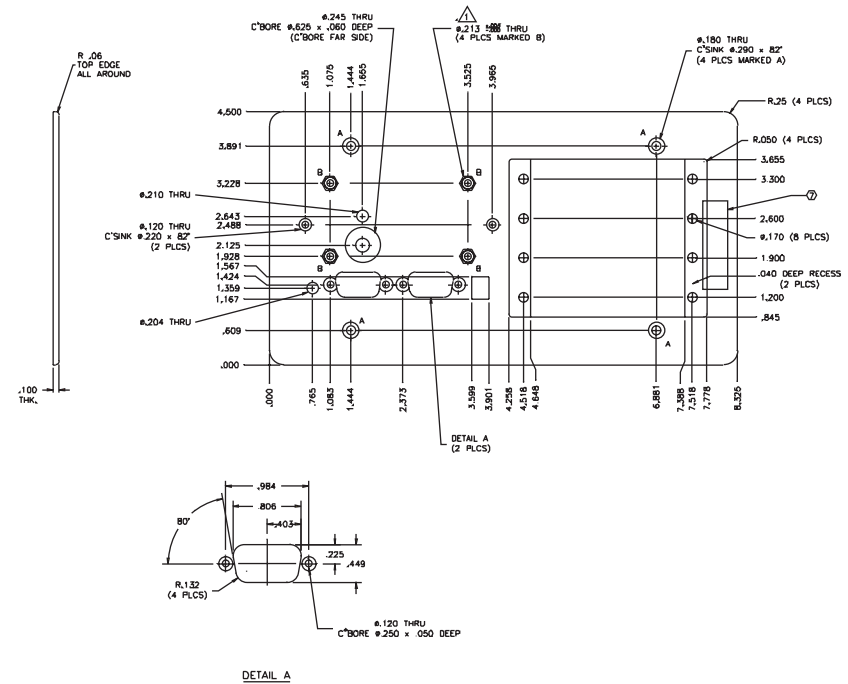
NOTE   *All dimensions are given in inches.*

Figure A-2 — WM model AAP faceplate dimensions

NOTE   *All dimensions are given in inches.*

Appendix, cont'd

Cables

The table below lists various lengths of high resolution VGA cables which can be used with the P/2 DA2 WM/EC.

Male-to-female VGA cables	Part number
VGA 6' HR	26-112-15
VGA 3' HR A (with audio)	29-491-01
VGA 6' HR A (with audio)	29-491-02
VGA 12' HR A (with audio)	29-491-03
VGA 25' HR A (with audio)	29-491-04
VGA 50' HR A (with audio)	29-491-05

Optional Architectural Adapter Plates

A variety of optional adapter plates for pass-through connections may be ordered for the P/2 DA2 WM/EC. See the figure A-3 below. The WM model can accommodate up to 4 adapter plates and the EC model can handle up to 3 adapter plates. The adapter plates come in 2 sizes: one and two.

The WM model may be configured as follows:
- 4 adapter plates of plate size one *or*
- 2 adapter plates of plate size two *or*
- 2 adapter plates of plate size one and one adapter plate of plate size two

The EC model may be configured as follows:
- 3 adapter plates of plate size one *or*
- 1 adapter plate of plate size two and 1 adapter plate of plate size one

Blank Plate (no connector)

Single Space

2 - BNC

3 - BNC

2 - RCA to Solder Cups

3 - RCA to Solder Cups

2 - S-video

Blank Plate (no connector)

Double Space

5 - BNC (Double)

2 - RJ-11
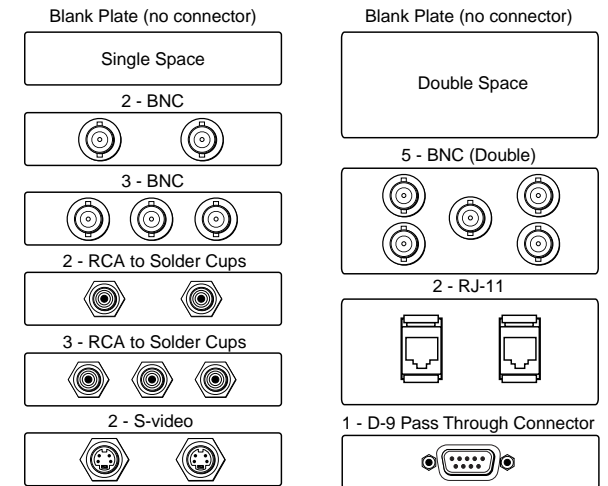
1 - D-9 Pass Through Connector

Figure A-3 — Examples of adapter plates

The tables on following pages list the available adapter plates and distinguish between plates with a single type of connector (Single type) or plates with more than one type of connector (Multi type).
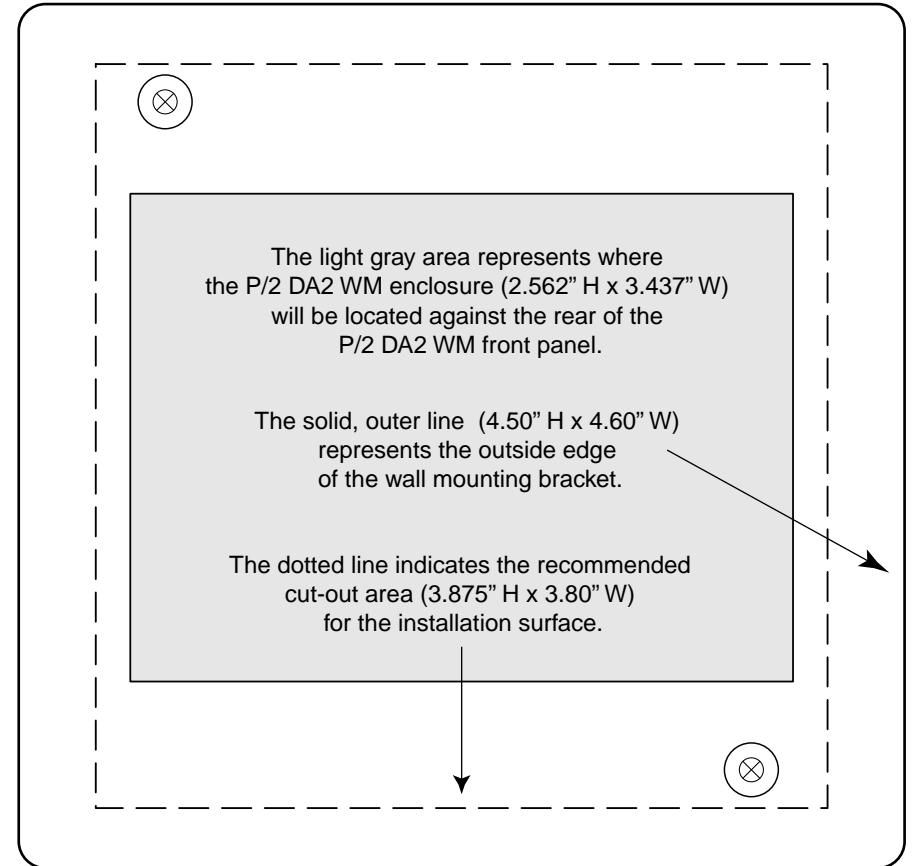
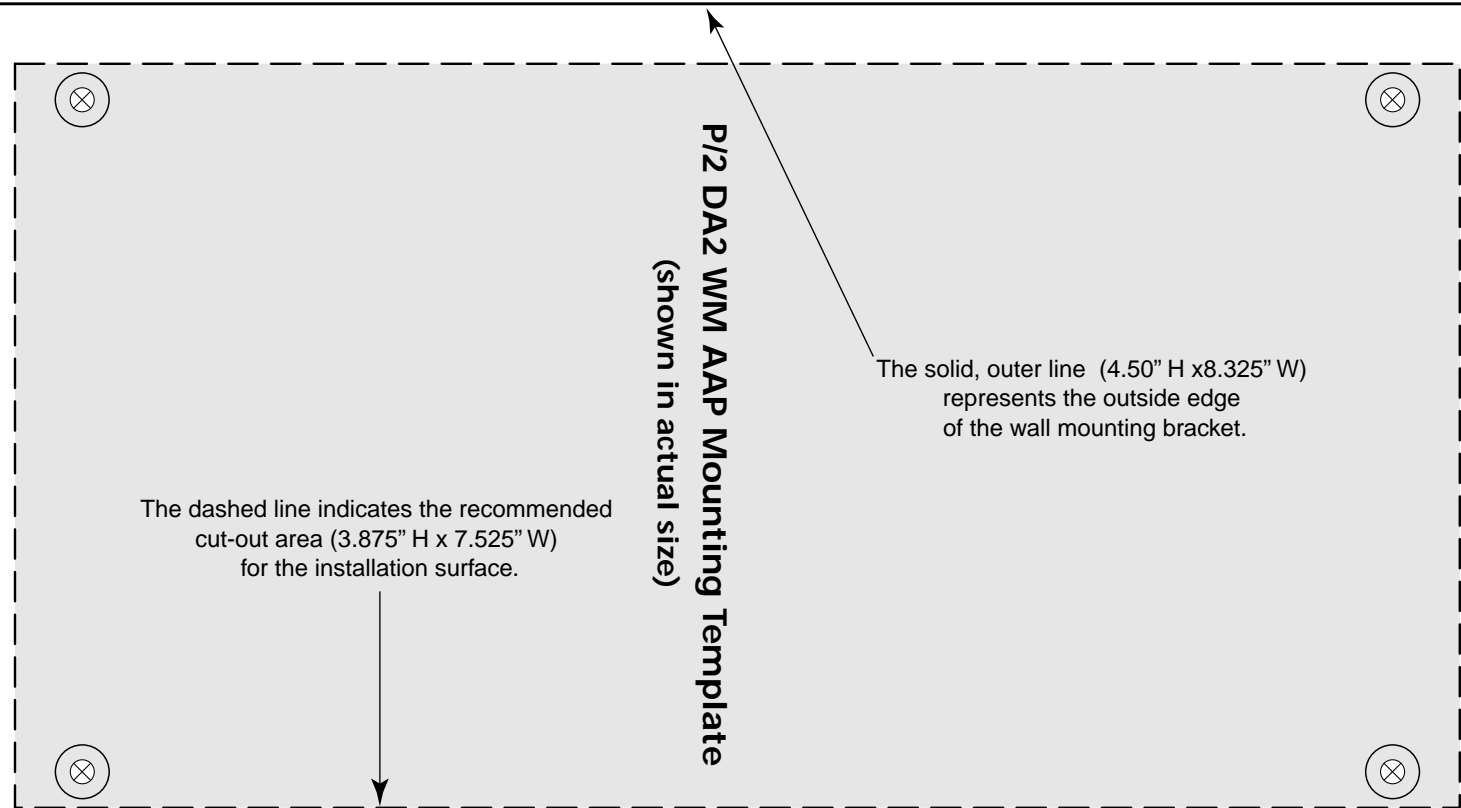| Single Type Connector Architectural Adapter Plates							
Adapter plate description	Plate size	Front connector type	Rear connector type	Part #	Gray	Black	White
Blank plate 1	1	n.a.	n.a.	70-090	-01	-11	-21
Blank plate 2	2	n.a.	n.a.	70-090	-02	-12	-22
2 BNC barrel (female to female)	1	BNC female	BNC female	70-091	-01	-11	-21
3 BNC barrel (female to female)	1	BNC female	BNC female	70-091	-02	-12	-22
5 BNC barrel (female to female)	2	BNC female	BNC female	70-091	-03	-13	-23
2 RCA female to solder cups	1	RCA female (red/black)	solder lug terminals	70-092	-01	-11	-21
3 RCA female to solder cups	1	RCA female (red/black)	solder lug terminals	70-092	-02	-12	-22
2 RCA female barrel (female to female)	1	RCA female (red/black)	RCA female	70-093	-01	-11	-21
3 RCA female barrel (female to female)	1	RCA female (red/black)	RCA female	70-093	-02	-12	-22
2 RCA to BNC barrel (female to female)	1	RCA female (red/black)	BNC female	70-094	-01	-11	-21
3 RCA to BNC barrel (female to female)	1	RCA female (red/black)	BNC female	70-094	-02	-12	-22
2 S-video to S-video barrel (female to female)	1	4-pin mini DIN female	4-pin mini DIN female	70-095	-01	-11	-21

2 F connector barrel	1	F connector female	F connector female	70-096	-01	-11	-21
2 ¼" stereo phono female	1	¼" stereo phono female	3 solder lug terminals	70-097	-01	-11	-21
2 ¼" mono phono female	1	¼" mono phono female	2 solder lug terminals	70-097	-02	-12	-22
2 3.5mm mini stereo female	1	3.5mm mini stereo female	3 solder lug terminals	70-098	-01	-11	-21
2 RJ-11 (female to female)	2	RJ-11 female	RJ-11 female	70-099	-01	-11	-21
2 RJ-45 (female to female)	2	RJ-45 female	RJ-45 female	70-100	-01	-11	-21
1 HD-15 (female to female)	1	15-pin HD female	15-pin HD female	70-101	-01	-11	-21
1 HD-15 (male to male)	1	15-pin HD male	15-pin HD male	70-101	-02	-12	-22
1 D-9 (female to female)	1	9-pin D female	9-pin D female	70-102	-01	-11	-21
1 D-9 (male to male)	1	9-pin D male	9-pin D male	70-102	-02	-12	-22
1 3-pin XLR female	2	3-pin XLR female	3 solder lug terminals	70-103	-01	-11	-21
1 4-pin XLR female	2	4-pin XLR female	3 solder lug terminals	70-103	-02	-12	-22
1 6-pin XLR female	2	6-pin XLR female	3 solder lug terminals	70-103	-03	-13	-23
2 6-pin mini DIN (keyboard/mouse)	1	6-pin mini DIN female	6-pin mini DIN female	70-104	-01	-11	-21
1 3.5mm, 5 pole captive screw terminal	1	3.5mm, 5 pole captive screw terminal	solder cups	70-105	-01	-11	-21
1 contact closure switch/ LED show-me and 3.5mm stereo mini jack	1	contact closure switch and 3.5mm mini stereo jack	solder cups	70-106	-01	-11	-21

Multi Type Connector Architectural Adapter Plates

Adapter plate description	Plate size	Front connector type	Rear connector type	Part #	Gray	Black	White
1 S-video female and 1 BNC female	1	4-pin mini DIN female and BNC female	4-pin mini DIN female and BNC female	70-107	-01	-02	-03
1 S-video female and 3 RCA female	2	4-pin mini DIN female and RCA female	4-pin mini DIN female and RCA female	70-107	-02	-12	-22
1 S-video female and 2 RCA female	1	4-pin mini DIN female and RCA female	4-pin mini DIN female and RCA female	70-107	-03	-13	-23
1 BNC female and 2 RCA female	1	BNC female and RCA female	BNC female and RCA female	70-108	-01	-11	-21
1 BNC female and 1 3.5mm mini stereo jack	1	BNC female and 3.5mm mini stereo jack	BNC female and 3 solder cups	70-108	-02	-12	-22
1 RCA female and 1 3.5mm mini stereo jack	1	RCA female and 3.5mm mini stereo jack	RCA female and 3 solder cups	70-109	-01	-02	-03

P/2 DA2 WM Mounting Template

Use this template as a guide for cutting the hole in the installation surface (wall or furniture). This diagram is shown at actual size.

The light gray area represents where the P/2 DA2 WM enclosure (2.562" H x 3.437" W) will be located against the rear of the P/2 DA2 WM front panel.

The solid, outer line (4.50" H x 4.60" W) represents the outside edge of the wall mounting bracket.

The dotted line indicates the recommended cut-out area (3.875" H x 3.80" W) for the installation surface.

P/2 DA2 WM AAP Mounting Template

(shown in actual size)

The solid, outer line (4.50" H x 8.325" W)
represents the outside edge
of the wall mounting bracket.

The dashed line indicates the recommended
cut-out area (3.875" H x 7.525" W)
for the installation surface.